USING TRANSFER BITS DURING DATA TRANSFER
FROM NON-VOLATILE TO VOLATILE MEMORIES

ABSTRACT

Structures and methods for transferring data from non-volatile to volatile memories. An extra bit, called a "transfer bit", is included in each data word. The transfer bit is set to the programmed value, and is monitored by a control circuit during the memory transfer. If the supply voltage is sufficient for correct programming, the transfer bit is read as "programmed", and the data transfer continues. If the supply voltage is below the minimum supply voltage for proper programming, the transfer bit is read as "erased", and the data transfer is reinitiated. In one embodiment, a second transfer bit set to the "erased" value is included in each word.